Amendments to the Claims:

Claims 37 and 42 have been canceled.

Claims 28-33 and 41 have been amended as follows:

- 28. (currently amended) An isolated nucleic acid encoding a polypeptide having at least 80% nucleic acid sequence identity to:
- (a) a nucleic acid sequence encoding the amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140);
- (b) a nucleic acid sequence encoding the amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;
- (c) a nucleic acid sequence encoding the amino acid sequence of the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140);
- (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;
 - (e) the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139);
- [[(f)]] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139); or
- [[(g)]] (e) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the cDNA deposited under ATCC accession number 209251, wherein the encoded polypeptide is capable of inducing chondrocyte redifferentiation.
- 29. (currently amended) The isolated nucleic acid of Claim 28 encoding a polypeptide having at least 85% nucleic acid sequence identity to:
- (a) a nucleic acid sequence encoding the amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140);
- (b) a nucleic acid sequence encoding the amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;
- (c) a nucleic acid sequence encoding the amino acid sequence of the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140);
- (d)—a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;

- (e) the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139);
- [[(f)]] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139); or
- [[(g)]] (e) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the cDNA deposited under ATCC accession number 209251, wherein the encoded polypeptide is capable of inducing chondrocyte redifferentiation.
- 30. (currently amended) The isolated nucleic acid of Claim 28 encoding a polypeptide having at least 90% nucleic acid sequence identity to:
- (a) a nucleic acid sequence encoding the amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140);
- (b) a nucleic acid sequence encoding the amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;
- (c) a nucleic acid sequence encoding the amino acid sequence of the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140);
- (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;
 - (e)—the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139);
- [[(f)]] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139); or
- [[(g)]] (e) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the cDNA deposited under ATCC accession number 209251, wherein the encoded polypeptide is capable of inducing chondrocyte redifferentiation.
- 31. (currently amended) The isolated nucleic acid of Claim 28 encoding a polypeptide having at least 95% nucleic acid sequence identity to:
- (a) a nucleic acid sequence encoding the amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140);
- (b) a nucleic acid sequence encoding the amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;

- (c) a nucleic acid sequence encoding the amino acid sequence of the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140);
- (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;
 - (e) the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139);
- [[(f)]] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139); or
- [[(g)]] (e) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the cDNA deposited under ATCC accession number 209251, wherein the encoded polypeptide is capable of inducing chondrocyte redifferentiation.
- 32. (currently amended) The isolated nucleic acid of Claim 28 encoding a polypeptide having at least 99% nucleic acid sequence identity to:
- (a) a nucleic acid sequence encoding the amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140);
- (b) a nucleic acid sequence encoding the amino acid sequence of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;
- (c) a nucleic acid sequence encoding the amino acid sequence of the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140);
- (d)—a nucleic acid sequence encoding the extracellular-domain of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;
 - (e) the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139);
- [[(f)]] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139); or
- [[(g)]] (e) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the cDNA deposited under ATCC accession number 209251, wherein the encoded polypeptide is capable of inducing chondrocyte redifferentiation.
 - 33. (currently amended) An isolated nucleic acid comprising:

- (a) a nucleic acid sequence encoding the polypeptide shown in Figure 84 (SEQ ID NO:140);
- (b) a nucleic acid sequence encoding the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;
- (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140);
- (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 84 (SEQ-ID-NO:140), lacking its associated signal peptide;
 - [[(e)]] (d) the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139);
- [[(f)]] (e) the full-length coding sequence of the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139); or
- [[(g)]] (f) the full-length coding sequence of the cDNA deposited under ATCC accession number 209251.
- 34. (currently amended) The isolated nucleic acid of Claim 33 comprising a nucleic acid sequence encoding the polypeptide shown in Figure 84 (SEQ ID NO:140).
- 35. (currently amended) The isolated nucleic acid of Claim 33 comprising a nucleic acid sequence encoding the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide.
- 36. (currently amended) The isolated nucleic acid of Claim 33 comprising the nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140).
 - 37. (canceled)
- 38. (currently amended) The isolated nucleic acid of Claim 33 comprising the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139).
- 39. (currently amended) The isolated nucleic acid of Claim 33 comprising the full-length coding sequence of the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139).

- 40. (previously presented) The isolated nucleic acid of Claim 33 comprising the full-length coding sequence of the cDNA deposited under ATCC accession number 209251.
 - 41. (currently amended) An isolated nucleic acid that hybridizes to:
- (a) a nucleic acid sequence encoding the polypeptide shown in Figure 84 (SEQ ID NO:140);
- (b) a nucleic acid sequence encoding the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;
- (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140);
- (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 84 (SEQ ID NO:140), lacking its associated signal peptide;
 - [[(e)]] (d) the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139);
- [[(f)]] (e) the full-length coding sequence of the nucleic acid sequence shown in Figure 83 (SEQ ID NO:139); or
- [[(g)]] (f) the full-length coding sequence of the cDNA deposited under ATCC accession number 209251, wherein the encoded polypeptide is capable of inducing chondrocyte redifferentiation.
 - 42. (canceled)
- 43. (previously presented) The isolated nucleic acid of Claim 41 which is at least 10 nucleotides in length.
 - 44. (previously presented) A vector comprising the nucleic acid of Claim 28.
- 45. (previously presented) The vector of Claim 44, wherein said nucleic acid is operably linked to control sequences recognized by a host cell transformed with the vector.
 - 46. (previously presented) A host cell comprising the vector of Claim 44.

47. (previously presented) The host cell of Claim 46, wherein said cell is a CHO cell, an E. coli or a yeast cell.